

Table 143. Energy Consumption Estimates by Source, Selected Years 1960-1999, Massachusetts

Year	Coal ^a Thousand Short Tons	Natural Gas ^b Billion Cubic Feet	Petroleum											Nuclear Electric Power	Hydro-electric Power ^d	Wood and Waste	Other ^{a,e}	Net Inter-state Flow of Electricity/Losses ^f	Total ^g
			Asphalt & Road Oil ^a	Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	Kero-sene ^a	LPG ^a	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,c}	Total						
			Thousand Barrels															Million kWh	
1960	4,559	78	2,270	968	51,240	1,209	5,718	1,148	799	34,993	39,108	R 1,269	R 138,722	34	982	—	—	-711	—
1965	4,932	114	2,867	1,702	55,825	3,166	3,496	1,511	915	39,752	54,207	1,120	164,561	966	664	—	—	-6,364	—
1970	910	147	2,843	276	59,239	7,864	2,103	1,820	947	49,527	86,130	1,121	211,870	1,209	753	—	—	-7,191	—
1975	1,016	154	1,832	228	58,665	8,009	867	2,315	786	54,630	65,975	1,127	194,432	3,781	417	—	—	6,757	—
1980	874	183	1,231	274	37,613	8,573	698	2,125	841	51,443	54,143	2,312	159,253	3,232	158	—	—	11,452	—
1985	4,176	219	1,051	134	33,072	6,984	737	1,719	765	54,847	36,075	2,268	137,652	6,133	4,574	—	—	5,631	—
1990	4,337	258	1,339	97	33,697	9,806	308	2,631	861	56,125	32,066	2,337	139,265	5,070	R ^h 1,684	—	—	R 28,874	—
1991	4,451	252	1,976	45	33,188	9,398	369	1,919	770	54,488	30,533	2,277	134,964	4,417	R 2,018	—	—	R 29,974	—
1992	4,257	295	1,567	45	35,150	7,880	424	1,869	785	55,436	27,386	2,426	132,967	4,742	R 1,543	—	—	R 38,695	—
1993	3,811	312	1,454	85	36,629	7,728	378	2,102	800	56,065	24,361	2,444	132,046	4,339	R 1,757	—	—	R 51,720	—
1994	3,932	337	886	73	35,313	7,433	336	2,056	836	56,871	21,079	2,397	127,278	3,859	R 1,504	—	—	R 56,154	—
1995	4,113	362	1,249	84	36,635	6,636	275	2,143	821	58,775	13,942	2,270	122,831	4,486	R 1,418	—	—	R 57,103	—
1996	4,477	358	1,270	90	34,929	6,873	209	R 2,563	797	59,794	15,500	R 4,911	R 126,936	5,324	R 1,731	—	—	R 59,463	—
1997	4,891	380	916	87	35,596	7,298	257	R 2,109	842	60,912	22,497	R 5,307	R 135,822	4,310	R 1,676	—	—	R 43,585	—
1998	3,189	338	838	87	33,587	7,728	290	1,969	882	62,284	18,895	5,387	131,946	5,698	1,597	—	—	68,054	—
1999	497	339	967	96	33,175	8,081	426	2,295	891	63,433	2,733	5,453	117,551	4,473	1,446	—	—	128,236	—

Trillion Btu																			
1960	118.8	80.6	15.1	4.9	298.5	6.7	32.4	4.6	4.8	183.8	245.9	R 7.6	R 804.3	0.4	10.6	42.8	0.0	-2.4	R 1,055.0
1965	127.9	115.7	19.0	8.6	325.2	17.8	19.8	6.1	5.6	208.8	340.8	6.0	957.7	11.4	6.9	48.7	0.0	-21.7	1,246.6
1970	21.4	149.1	18.9	1.4	345.1	44.5	11.9	6.9	5.7	260.2	541.5	6.0	1,242.0	13.3	7.9	57.1	0.0	-24.5	1,466.3
1975	24.5	154.6	12.2	1.2	341.7	45.3	4.9	8.6	4.8	287.0	414.8	6.1	1,126.5	41.6	4.3	49.0	0.0	23.1	1,423.6
1980	22.8	185.5	8.2	1.4	219.1	48.5	4.0	7.8	5.1	270.2	340.4	12.6	917.2	35.3	1.6	R 59.8	0.0	39.1	R 1,261.3
1985	110.2	224.8	7.0	0.7	192.6	39.5	4.2	6.2	4.6	288.1	226.8	12.2	781.9	66.3	47.8	R 59.8	0.0	19.2	R 1,310.0
1990	113.1	268.0	8.9	0.5	196.3	55.5	1.7	9.5	5.2	294.8	201.6	12.7	786.7	54.1	R ^h 17.5	R 53.7	R ^h 0.2	R 98.5	R ^h 1,400.5
1991	116.8	261.3	13.1	0.2	193.3	52.8	2.1	6.9	4.7	286.2	192.0	12.3	763.7	47.4	R 21.1	R 57.1	0.2	R 102.3	R 1,377.9
1992	111.0	305.9	10.4	0.2	204.7	44.5	2.4	6.8	4.8	291.2	172.2	13.0	750.3	50.6	R 16.0	R 61.0	R 0.3	132.0	R 1,431.9
1993	98.5	324.2	9.6	0.4	213.4	43.7	2.1	7.6	4.8	294.5	153.2	13.2	742.5	46.3	R 18.1	R 62.1	0.3	R 176.5	R 1,472.6
1994	100.7	346.1	5.9	0.4	205.7	42.1	1.9	7.5	5.1	R 297.4	132.5	12.9	R 711.4	41.2	R 15.5	R 65.4	0.3	R 191.6	R 1,476.7
1995	104.4	371.7	8.3	0.4	213.4	37.6	1.6	7.8	5.0	R 306.5	87.7	12.2	R 680.4	47.8	R 14.6	R 68.8	0.3	R 194.8	R 1,488.6
1996	113.1	367.5	8.4	0.5	203.5	39.0	1.2	R 9.3	4.8	R 311.9	97.4	R 26.3	R 702.2	56.6	R 17.9	R 69.1	R 0.4	R 202.9	R 1,534.5
1997	122.9	388.6	6.1	0.4	207.3	41.4	1.5	R 7.6	5.1	R 317.5	141.4	R 28.6	R 757.0	45.8	R 17.4	R 62.8	0.4	R 148.7	R 1,550.8
1998	80.4	345.5	5.6	0.4	195.6	43.8	1.6	7.1	5.3	324.6	118.8	29.1	732.1	60.5	16.5	50.2	0.4	232.2	1,522.9
1999	13.0	355.5	6.4	0.5	193.2	45.8	2.4	8.3	5.4	330.6	17.2	29.3	639.1	47.5	15.0	55.3	0.4	437.5	1,569.1

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.
^b Includes supplemental gaseous fuels.
^c "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."
^d If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.
^e "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.
^f Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number

indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.
^g From 1989, "Total" does not equal the sum of the columns. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total but not in any other columns.
^h There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.
 kWh=kilowatthours. R=Revised data. — =Not applicable.
 Note: Totals may not equal sum of components due to independent rounding.
 Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

Table 144. Residential Energy Consumption Estimates, Selected Years 1960-1999, Massachusetts

Year	Coal ^a Thousand Short Tons	Natural Gas ^b Billion Cubic Feet	Petroleum				Wood Thousand Cords	Geothermal	Solar ^c	Electricity ^a Million Kilowatthours	Net Energy	Electrical System Energy Losses ^d	Total
			Distillate Fuel ^a	Kerosene ^a	LPG ^a	Total						Million Kilowatthours	
			Thousand Barrels										
1960	394	45	34,305	4,858	752	39,915	427	—	—	4,190	—	10,423	—
1965	195	65	37,082	2,682	926	40,689	378	—	—	5,766	—	13,767	—
1970	105	83	38,530	1,434	933	40,897	459	—	—	9,335	—	22,621	—
1975	57	90	37,860	591	1,006	39,456	491	—	—	10,648	—	25,684	—
1980	50	94	22,712	323	675	23,710	R 1,560	—	—	11,571	—	28,137	—
1985	70	98	17,968	577	1,021	19,566	1,322	—	—	12,907	—	30,324	—
1990	29	107	17,287	163	1,358	18,808	904	—	—	15,581	—	R 34,085	—
1991	15	103	16,640	151	1,229	18,020	952	—	—	15,379	—	R 33,434	—
1992	25	120	18,812	259	1,219	20,291	1,002	—	—	15,560	—	R 33,186	—
1993	22	121	20,527	250	1,344	22,120	R 1,029	—	—	15,785	—	R 33,341	—
1994	13	120	19,764	218	1,389	21,372	R 1,008	—	—	16,049	—	R 33,493	—
1995	14	106	19,425	130	1,451	21,006	R 1,119	—	—	15,993	—	R 33,344	—
1996	16	114	18,625	148	R 1,720	R 20,493	R 1,117	—	—	16,256	—	R 33,877	—
1997	14	112	18,916	190	R 1,614	R 20,720	R 726	—	—	16,274	—	R 33,853	—
1998	12	102	17,312	197	1,478	18,987	640	—	—	16,388	—	33,854	—
1999	15	106	17,923	179	1,522	19,624	686	—	—	17,392	—	34,077	—

Trillion Btu													
1960	9.8	46.6	199.8	27.5	3.0	230.4	8.5	0.0	0.0	14.3	309.6	35.6	345.2
1965	4.8	65.7	216.0	15.2	3.7	234.9	7.6	0.0	0.0	19.7	332.6	47.0	379.6
1970	2.5	83.6	224.4	8.1	3.5	236.1	9.2	0.0	0.0	31.8	363.2	77.2	440.4
1975	1.3	90.6	220.5	3.3	3.7	227.6	9.8	0.0	0.0	36.3	365.6	87.6	453.3
1980	1.2	96.0	132.3	1.8	2.5	136.6	31.2	0.0	0.0	39.5	304.4	96.0	400.4
1985	1.6	100.1	104.7	3.3	3.7	111.6	26.4	0.0	0.0	44.0	283.9	103.5	387.3
1990	0.7	110.5	100.7	0.9	4.9	106.5	18.1	e 0.0	e 0.2	53.2	e 289.2	116.3	R e 405.5
1991	0.4	106.9	96.9	0.9	4.4	102.2	19.0	0.0	0.2	52.5	281.2	R 114.1	R 395.3
1992	0.6	124.2	109.6	1.5	4.4	115.5	20.0	0.0	0.2	53.1	313.6	R 113.2	R 426.8
1993	0.5	125.9	119.6	1.4	4.8	125.8	R 20.6	0.0	0.2	53.9	R 326.9	113.8	440.6
1994	0.3	122.6	115.1	1.2	5.0	121.4	R 20.2	0.0	0.2	54.8	R 319.5	114.3	433.7
1995	0.3	108.5	113.2	0.7	5.3	119.1	R 22.4	0.0	0.2	54.6	R 305.2	R 113.8	R 419.0
1996	0.4	117.3	108.5	0.8	R 6.2	R 115.5	22.3	0.0	0.2	55.5	R 311.3	R 115.6	R 426.9
1997	0.3	114.6	110.2	1.1	R 5.8	R 117.1	R 14.5	0.0	0.2	55.5	R 302.3	R 115.5	R 417.8
1998	0.3	104.4	100.8	1.1	5.3	107.3	12.8	0.0	0.2	55.9	280.9	115.5	396.4
1999	0.4	110.8	104.4	1.0	5.5	110.9	13.7	(s)	0.2	59.3	295.4	116.3	411.7

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

^b Includes supplemental gaseous fuels.

^c Includes small amounts of solar thermal and photovoltaic energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.

^d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^e There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of

renewable energy sources beginning in 1989.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

Table 145. Commercial Energy Consumption Estimates, Selected Years 1960-1999, Massachusetts

Year	Coal ^a	Natural Gas ^b	Petroleum						Wood	Geothermal	Electricity ^a	Net Energy	Electrical System Energy Losses ^c	Total ^d
			Distillate Fuel ^a	Kerosene ^a	LPG ^a	Motor Gasoline	Residual Fuel ^a	Total						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Thousand Cords	Million Kilowatthours	Million Kilowatthours			
1960	431	10	11,965	404	133	135	10,036	22,672	8	—	3,011	—	7,488	—
1965	174	16	12,933	223	163	92	14,503	27,914	7	—	4,302	—	10,272	—
1970	81	35	13,438	119	165	102	14,872	28,696	9	—	7,782	—	18,858	—
1975	45	38	13,204	49	178	109	9,122	22,662	9	—	11,397	—	27,490	—
1980	50	53	7,510	30	119	191	4,854	12,704	37	—	13,047	—	31,726	—
1985	67	41	5,703	108	180	188	3,157	9,336	R 35	—	15,566	—	36,571	—
1990	34	51	6,236	127	240	69	4,535	11,207	R 57	—	19,520	—	R 42,702	—
1991	12	53	7,610	200	217	182	4,562	12,772	R 61	—	19,421	—	R 42,219	—
1992	33	64	6,685	73	215	164	3,711	10,847	R 65	—	19,563	—	R 41,724	—
1993	22	65	6,334	113	237	53	2,592	9,330	R 83	—	19,670	—	R 41,545	—
1994	9	85	5,548	100	245	57	2,998	8,948	84	—	20,105	—	R 41,958	—
1995	13	82	6,272	110	256	65	3,117	9,820	84	—	20,255	—	R 42,231	—
1996	17	96	5,718	47	R 303	65	2,472	R 8,605	92	—	20,711	—	R 43,163	—
1997	15	106	5,859	47	R 285	48	2,286	R 8,524	R 80	—	21,203	—	R 44,104	—
1998	14	90	5,510	70	261	66	1,506	7,413	80	—	21,773	—	44,979	—
1999	22	65	3,851	225	269	63	1,422	5,830	96	—	21,815	—	42,743	—

Trillion Btu														
1960	10.7	10.6	69.7	2.3	0.5	0.7	63.1	136.3	0.2	0.0	10.3	168.1	25.6	193.7
1965	4.3	16.5	75.3	1.3	0.7	0.5	91.2	168.9	0.1	0.0	14.7	204.5	35.0	239.6
1970	1.9	35.8	78.3	0.7	0.6	0.5	93.5	173.6	0.2	0.0	26.6	238.0	64.3	302.4
1975	1.0	38.0	76.9	0.3	0.7	0.6	57.4	135.8	0.2	0.0	38.9	213.8	93.8	307.6
1980	1.2	54.3	43.7	0.2	0.4	1.0	30.5	75.9	0.7	0.0	44.5	176.7	108.2	284.9
1985	1.6	42.4	33.2	0.6	0.6	1.0	19.8	55.3	R 0.7	0.0	53.1	R 153.1	124.8	R 277.9
1990	0.8	52.3	36.3	0.7	0.9	0.4	28.5	66.8	R 1.1	e (s)	66.6	R e 187.7	145.7	R e 333.5
1991	0.3	55.2	44.3	1.1	0.8	1.0	28.7	75.9	R 1.2	(s)	66.3	R 198.9	R 144.1	R 343.0
1992	0.8	66.8	38.9	0.4	0.8	0.9	23.3	64.3	R 1.3	0.1	66.8	R 200.0	R 142.4	R 342.4
1993	0.5	67.9	36.9	0.6	0.9	0.3	16.3	55.0	R 1.7	0.1	67.1	192.3	141.8	R 334.0
1994	0.2	86.6	32.3	0.6	0.9	0.3	18.9	52.9	1.7	0.1	68.6	R 210.2	R 143.2	353.3
1995	0.3	84.4	36.5	0.6	0.9	0.3	19.6	58.0	1.7	0.1	69.1	R 213.7	R 144.1	R 357.8
1996	0.4	98.6	33.3	0.3	R 1.1	0.3	15.5	50.5	1.8	0.1	70.7	R 222.3	R 147.3	R 369.5
1997	0.4	108.0	34.1	0.3	1.0	0.3	14.4	R 50.0	1.6	0.2	72.3	232.5	R 150.5	R 383.0
1998	0.3	92.1	32.1	0.4	0.9	0.3	9.5	43.3	1.6	0.2	74.3	211.8	153.5	365.3
1999	0.5	68.3	22.4	1.3	1.0	0.3	8.9	33.9	1.9	0.2	74.4	179.4	145.8	325.2

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

^b Includes supplemental gaseous fuels.

^c Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^d Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.

^e There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of

renewable energy sources beginning in 1989.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

Table 146. Industrial Energy Consumption Estimates, Selected Years 1960-1999, Massachusetts

Year	Coal Thousand Short Tons	Natural Gas ^a Billion Cubic Feet	Petroleum									Hydro-electric Power ^b Million kWh	Wood and Waste	Other ^{b,d}	Electricity ^b		Electrical System Energy Losses ^e Million kWh	Total
			Asphalt and Road Oil ^b	Distillate Fuel ^b	Kerosene ^b	LPG ^b	Lubricants ^b	Motor Gasoline	Residual Fuel ^b	Other ^{b,c}	Total				Million kWh	Net Energy		
			Thousand Barrels															
1960	1,266	12	2,270	2,322	456	260	356	133	17,875	R 1,269	R 24,942	117	—	—	5,075	—	12,625	—
1965	496	20	2,867	2,841	590	401	507	206	25,076	1,120	33,607	100	—	—	6,546	—	15,630	—
1970	149	23	2,843	2,897	549	693	506	111	25,742	1,121	34,463	72	—	—	7,418	—	17,975	—
1975	110	24	1,832	2,654	227	1,099	353	81	15,891	1,127	23,264	67	—	—	7,330	—	17,680	—
1980	98	29	1,231	1,886	345	1,305	377	91	2,663	2,312	10,209	63	—	—	8,486	—	20,635	—
1985	176	33	1,051	1,044	52	448	343	367	8,399	2,268	13,973	63	—	—	9,454	—	22,210	—
1990	73	44	1,339	2,176	18	973	386	414	2,640	2,337	10,284	R f 280	—	—	10,157	—	R 22,219	—
1991	85	55	1,976	1,195	18	404	346	332	1,406	2,277	7,955	R 263	—	—	9,794	—	R 21,290	—
1992	155	71	1,567	1,855	92	372	352	334	2,180	2,426	9,178	R 244	—	—	9,663	—	R 20,609	—
1993	115	95	1,454	1,402	15	460	359	175	3,537	2,444	9,846	R 309	—	—	9,605	—	R 20,286	—
1994	65	93	886	1,121	17	333	375	347	2,731	2,397	8,209	R 309	—	—	9,710	—	R 20,264	—
1995	42	108	1,249	1,237	35	387	369	373	1,481	2,270	7,400	R 328	—	—	10,026	—	R 20,904	—
1996	38	100	1,270	1,237	14	R 495	358	372	1,719	R 4,911	R 10,375	R 352	—	—	10,085	—	R 21,018	—
1997	36	108	916	1,166	21	R 163	378	392	1,759	R 5,307	R 10,101	R 202	—	—	9,930	—	R 20,654	—
1998	35	125	838	1,031	23	185	396	316	1,892	5,387	10,068	343	—	—	10,212	—	21,096	—
1999	33	158	967	1,224	22	348	400	297	1,081	5,453	9,792	300	—	—	9,966	—	19,526	—

Trillion Btu																		
1960	33.2	12.0	15.1	13.5	2.6	1.0	2.2	0.7	112.4	R 7.6	R 155.0	1.3	34.1	0.0	17.3	R 252.8	43.1	R 295.9
1965	12.8	20.0	19.0	16.5	3.3	1.6	3.1	1.1	157.6	6.0	208.3	1.0	41.0	0.0	22.3	305.6	53.3	358.9
1970	3.6	22.8	18.9	16.9	3.1	2.6	3.1	0.6	161.8	6.0	213.0	0.8	47.8	0.0	25.3	313.3	61.3	374.6
1975	2.6	24.1	12.2	15.5	1.3	4.1	2.1	0.4	99.9	6.1	141.6	0.7	39.0	0.0	25.0	233.0	60.3	293.3
1980	2.4	29.4	8.2	11.0	2.0	4.8	2.3	0.5	16.7	12.6	58.0	0.7	R 27.8	0.0	29.0	R 147.2	70.4	R 217.6
1985	4.4	33.9	7.0	6.1	0.3	1.6	2.1	1.9	52.8	12.2	84.0	0.7	R 32.6	0.0	32.3	R 187.8	75.8	R 263.6
1990	1.8	45.8	8.9	12.7	0.1	3.5	2.3	2.2	16.6	12.7	59.0	R f 2.9	R 34.5	f 0.0	34.7	R f 178.7	75.8	R f 254.5
1991	2.1	56.9	13.1	7.0	0.1	1.5	2.1	1.7	8.8	12.3	46.6	R 2.7	R 36.8	0.0	33.4	R 178.6	R 72.6	R 251.2
1992	3.9	73.5	10.4	10.8	0.5	1.3	2.1	1.8	13.7	13.0	53.7	R 2.5	R 39.6	0.0	33.0	R 206.2	R 70.3	R 276.5
1993	2.9	98.3	9.6	8.2	0.1	1.7	2.2	0.9	22.2	13.2	58.0	R 3.2	R 39.8	0.0	32.8	R 235.0	69.2	R 304.2
1994	1.6	95.1	5.9	6.5	0.1	1.2	2.3	1.8	17.2	12.9	47.9	R 3.2	R 43.5	0.0	33.1	R 224.4	69.1	R 293.6
1995	1.1	110.5	8.3	7.2	0.2	1.4	2.2	R 1.9	9.3	12.2	42.8	R 3.4	R 44.7	0.0	34.2	R 236.7	71.3	R 308.0
1996	0.9	102.6	8.4	7.2	0.1	R 1.8	2.2	R 1.9	10.8	R 26.3	R 58.7	R 3.6	R 44.9	0.0	34.4	R 245.2	R 71.7	R 316.9
1997	0.9	110.5	6.1	6.8	0.1	R 0.6	2.3	R 2.0	11.1	R 28.6	R 57.6	R 2.1	R 46.7	0.0	33.9	R 251.6	R 70.5	R 322.1
1998	0.9	128.1	5.6	6.0	0.1	0.7	2.4	1.6	11.9	29.1	57.4	3.5	35.8	0.0	34.8	260.5	72.0	332.5
1999	0.8	165.2	6.4	7.1	0.1	1.3	2.4	1.5	6.8	29.3	55.0	3.1	39.7	27.0	34.0	324.8	66.6	391.4

^a Includes supplemental gaseous fuels.

^b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

^c "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."

^d "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for

electrical system energy losses.

^f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.

kWh=kilowatt-hours. — =Not applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

Table 147. Transportation Energy Consumption Estimates, Selected Years 1960-1999, Massachusetts

Year	Coal ^a	Natural Gas ^b	Petroleum								Ethanol ^c	Electricity ^a	Net Energy	Electrical System Energy Losses ^d	Total ^c
			Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	LPG ^a	Lubricants ^a	Motor Gasoline	Residual Fuel ^a	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours	Million Kilowatthours	Total ^c	
1960	22	(s)	968	2,371	1,209	4	443	34,725	1,207	40,927	0	105	—	261	—
1965	2	(s)	1,702	2,632	3,166	22	408	39,454	2,472	49,856	0	105	—	251	—
1970	(s)	1	276	3,198	7,864	29	441	49,314	3,215	64,336	0	105	—	254	—
1975	(s)	1	228	4,485	7,967	33	433	54,440	1,049	68,634	0	105	—	253	—
1980	0	1	274	4,900	8,563	26	463	51,161	900	66,287	0	167	—	406	—
1985	0	1	134	7,536	6,984	70	422	54,292	874	70,311	^e 0	193	—	453	—
1990	0	1	97	7,510	9,806	59	475	55,642	1,385	74,973	^R 0	183	—	401	—
1991	0	2	45	7,270	9,398	69	425	53,974	443	71,623	^R 0	203	—	442	—
1992	0	2	45	7,404	7,880	63	433	54,938	434	71,197	^R 0	212	—	452	—
1993	0	2	85	7,980	7,728	62	441	55,837	349	72,482	^R (s)	221	—	468	—
1994	0	2	73	8,346	7,433	88	461	56,466	369	73,236	0	227	—	474	—
1995	0	2	84	9,088	6,636	50	453	58,337	202	74,850	0	236	—	493	—
1996	0	2	90	8,896	6,873	^R 45	439	59,356	2,036	^R 77,736	0	241	—	^R 503	—
1997	0	2	87	9,263	7,298	^R 47	464	60,472	1,409	^R 79,041	0	252	—	^R 525	—
1998	0	2	87	9,276	7,728	45	486	61,902	32	79,556	0	234	—	483	—
1999	0	3	96	9,782	8,081	156	491	63,073	26	81,706	0	234	—	458	—
Trillion Btu															
1960	0.6	0.3	4.9	13.8	6.7	(s)	2.7	182.4	7.6	218.1	0.0	0.4	219.3	0.9	220.2
1965	(s)	0.2	8.6	15.3	17.8	0.1	2.5	207.3	15.5	267.1	0.0	0.4	267.7	0.9	268.6
1970	(s)	1.1	1.4	18.6	44.5	0.1	2.7	259.0	20.2	346.5	0.0	0.4	348.0	0.9	348.9
1975	(s)	0.5	1.2	26.1	45.1	0.1	2.6	286.0	6.6	367.7	0.0	0.4	368.5	0.9	369.4
1980	0.0	0.7	1.4	28.5	48.4	0.1	2.8	268.7	5.7	355.7	0.0	0.6	356.9	1.4	358.3
1985	0.0	1.4	0.7	43.9	39.5	0.3	2.6	285.2	5.5	377.6	^e 0.0	0.7	^e 379.6	1.5	^e 381.2
1990	0.0	1.3	0.5	43.7	55.5	0.2	2.9	292.3	8.7	403.8	^R 0.0	0.6	405.7	1.4	407.1
1991	0.0	1.6	0.2	42.3	52.8	0.2	2.6	283.5	2.8	384.6	^R 0.0	0.7	386.8	1.5	388.3
1992	0.0	1.8	0.2	43.1	44.5	0.2	2.6	288.6	2.7	382.1	^R 0.0	0.7	384.6	1.5	386.1
1993	0.0	2.3	0.4	46.5	43.7	0.2	2.7	293.3	2.2	389.0	(s)	0.8	392.1	1.6	393.7
1994	0.0	1.9	0.4	48.6	42.1	0.3	2.8	^R 295.3	2.3	^R 391.8	0.0	0.8	^R 394.5	1.6	^R 396.1
1995	0.0	1.9	0.4	52.9	37.6	0.2	2.7	^R 304.2	1.3	^R 399.4	0.0	0.8	^R 402.2	1.7	^R 403.8
1996	0.0	2.2	0.5	51.8	39.0	0.2	2.7	^R 309.6	12.8	^R 416.5	0.0	0.8	^R 419.5	1.7	^R 421.2
1997	0.0	2.4	0.4	54.0	41.4	^R 0.2	2.8	^R 315.2	8.9	^R 422.9	0.0	0.9	^R 426.1	1.8	^R 427.9
1998	0.0	2.0	0.4	54.0	43.8	0.2	2.9	322.6	0.2	424.2	0.0	0.8	427.0	1.6	428.6
1999	0.0	2.8	0.5	57.0	45.8	0.6	3.0	328.7	0.2	435.7	0.0	0.8	439.2	1.6	440.8

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

^b Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

^c Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

^d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^e There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

Table 148. Estimates of Energy Input at Electric Utilities, Selected Years, 1960-1999, Massachusetts

Year	Coal	Natural Gas ^a	Petroleum				Nuclear Electric Power	Hydroelectric Power ^e	Wood and Waste	Geothermal Energy	Other ^{b,f}	Total ^g
			Heavy Oil ^{b,c}	Light Oil ^{b,d}	Petroleum Coke ^b	Total						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Million Kilowatthours					
1960	2,446	11	9,990	277	0	10,267	34	865	0	0	0	—
1965	4,066	13	12,157	337	0	12,494	966	564	0	0	0	—
1970	575	6	42,301	1,176	0	43,477	1,209	682	0	0	0	—
1975	804	1	39,912	503	0	40,415	3,781	350	0	0	0	—
1980	676	5	45,726	616	0	46,342	3,232	96	0	0	0	—
1985	3,863	45	23,645	822	0	24,467	6,133	4,511	0	0	0	—
1990	4,201	55	23,505	488	0	23,993	5,070	R 1,404	0	0	0	—
1991	4,339	39	24,121	473	0	24,594	4,417	R 1,755	0	0	0	—
1992	4,044	38	21,061	394	0	21,455	4,742	R 1,299	0	0	0	—
1993	3,652	29	17,883	386	0	18,269	4,339	R 1,448	0	0	0	—
1994	3,845	39	14,981	533	0	15,514	3,859	R 1,195	0	0	0	—
1995	4,044	65	9,143	612	0	9,755	4,486	R 1,090	0	0	0	—
1996	4,406	45	9,273	453	0	9,727	5,324	R 1,380	0	0	0	—
1997	4,826	51	17,043	392	0	17,436	4,310	R 1,474	0	0	0	—
1998	3,129	18	15,465	458	0	15,923	5,698	1,254	0	0	0	—
1999	427	8	205	394	0	600	1,931	1,146	0	0	0	—

Trillion Btu												
1960	64.5	11.2	62.8	1.6	0.0	64.4	0.4	9.3	0.0	0.0	0.0	149.8
1965	106.0	13.3	76.4	2.0	0.0	78.4	11.4	5.9	0.0	0.0	0.0	215.0
1970	13.4	5.7	265.9	6.8	0.0	272.8	13.3	7.2	0.0	0.0	0.0	312.3
1975	19.6	1.4	250.9	2.9	0.0	253.8	41.6	3.6	0.0	0.0	0.0	320.1
1980	18.1	5.1	287.5	3.6	0.0	291.1	35.3	1.0	0.0	0.0	0.0	350.5
1985	102.6	46.9	148.7	4.8	0.0	153.4	66.3	47.1	0.0	0.0	0.0	416.4
1990	109.7	58.1	147.8	2.8	0.0	150.6	54.1	R 14.6	0.0	0.0	0.0	R 395.7
1991	114.0	40.7	151.7	2.8	0.0	154.4	47.4	R 18.3	0.0	0.0	0.0	R 382.9
1992	105.7	39.6	132.4	2.3	0.0	134.7	50.6	R 13.4	0.0	0.0	0.0	R 349.0
1993	94.6	29.8	112.4	2.2	0.0	114.7	46.3	R 14.9	0.0	0.0	0.0	304.4
1994	98.5	40.0	94.2	3.1	0.0	97.3	41.2	R 12.3	0.0	0.0	0.0	R 293.9
1995	102.7	66.3	57.5	3.6	0.0	61.0	47.8	R 11.2	0.0	0.0	0.0	R 294.7
1996	111.3	46.8	58.3	2.6	0.0	60.9	56.6	R 14.3	0.0	0.0	0.0	R 294.8
1997	121.3	53.2	107.2	2.3	0.0	109.4	45.8	R 15.3	0.0	0.0	0.0	R 352.2
1998	78.9	19.0	97.2	2.7	0.0	99.9	60.5	13.0	0.0	0.0	0.0	276.3
1999	11.2	8.4	1.3	2.3	0.0	3.6	20.5	11.9	0.0	0.0	0.0	61.3

^a Includes supplemental gaseous fuels.

^b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

^c Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

^d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

^e If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

^f "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

^g If applicable, from 1989, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.

R=Revised data.

— =Not applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.